



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,136	08/16/2005	Aidan Charles Pennington	GB9-2002-0038-US1	3998
49056	7590	11/14/2007		
LIEBERMAN & BRANDSDORFER, LLC			EXAMINER	
802 STILL CREEK LANE			DEWS, BROOKE J	
GAITHERSBURG, MD 20878				
			ART UNIT	PAPER NUMBER
			2182	
			MAIL DATE	DELIVERY MODE
			11/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/522,136	PENNINGTON, AIDAN CHARLES	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brooke J. Dews	2182	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/07/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

1. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

In light of the amendment filed on 10/23/2007 the application is still pending. Upon further consideration of amended claims, examiner maintains rejection in view of George Black et al. (US Patent 5878056), and Dave Tang "Storage Area Networking: The Network Behind the Server", and Applicant's admitted prior art (AAPA).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2182

2. Claims 11, 12, 17-20, 24-27, 31-38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over George Black et al. (US Patent 5878056), hereafter Black, in view of Dave Tang, (Gadzoox Microsystems) "Storage Area Networking: The Network Behind the Server", hereafter Gadzoox.

**Regarding claims 11 and 33** Black discloses a computer system comprising:

an asynchronous message (**asynchronous communication**) and queue system (via **MQSeries product; Column 9 line 13-30**);

a controller (via **message channel agent, MCA 180/ 180' and 190/190'; Figure 3**) in communication with said asynchronous message and queue system (via **MQSeries product**);

said controller (**MCA**) having control means (via **transport connection 195**) that control (**moving the messages**) a message queue on behalf of a queue manager (**130/130'**); (**Column 8 line 60-63**)

and said controller (**MCA**) that controls a message (**send/receive a message**) selected from a group (**batch**) consisting of: non-persistent (**transient**) and persistent (**permanent**). (**Column 16 lines 11-25**)

Black, however, does not explicitly disclose a computer system comprising a storage area network.

Gadzoox discloses said storage area network. (Pages 1 and 2)

Gadzoox and Black are analogous art because they are from the same field of endeavor/problem involving error or fault detection or recovery.

Though Black does not explicitly reveal the type of network used for controlling (via queue manager) queues, Gadzoox discloses the various benefits of SAN approach where SAN controller includes managability of the storage devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate Gadzoox's Storage Area Network approach for managing storage with Black's message queue network, for the benefits of high bandwidth, modular scalability, high availability and fault tolerance, manageability, ease of integration, and total cost of ownership. (**Found on page 2 of Gadzoox**)

Therefore, it would have been obvious to combine Gadzoox with Black to obtain the invention as specified in claims 11 and 33.

Art Unit: 2182

**Claim 12** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system (**Figure 2 and 3**) wherein said message queue (**destination queue 170/170' and transmission queue 160/160'**) supports simultaneous access by a first queue manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**). (**Figure 3**)

**Claim 17** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system wherein said transactional message control (**via sending/ receiving MCA; Figure 5**) is in the form of a syncpoint coordinator (**via syncpoint-manager-controlled unit 330 and 360**). (**Column 12 line 9-11, 25-27, 42-46; Figure 5**)

**Claim 18** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system wherein said network controller includes a lock manager (**via queue manager software**) adapted to preserve data integrity (**provide reliable storage of queued messages**). (**Column 9 line 27-30**)

**Regarding claims 19, 26, 37, and 40** Black discloses a method for communicating in a computer system (**Figure 2 and 3**) comprising:

managing a queue (**destination queue 170/170' and transmission queue 160/160'**) in a network of said computer system (**10**) supporting an asynchronous messaging (**asynchronous communication**) and queuing system (**via MQSeries product; Column 9 line 13-30**);

receiving a message request (**via MQPUT; Figure 3**) at a queue manager (**message queue manager 130/130'**) of said network (**Figure 2 and 3**);

and passing (**via MQGET**) said received message request (**via MQPUT**) to a network controller (**message channel agent, MCA 180/ 180' and 190/190'; Figure 3**) of said network (**Figure 2 and 3**), wherein said controller includes means to control a message (**send/receive a message**) selected from a group (**batch**) consisting of non-persistent (**transient**) and persistent (**permanent**). (**Column 16 lines 11-25**)

Art Unit: 2182

Though Black reveals a communication network, Black, however, does not explicitly disclose a computer system comprising a storage area network.

Gadzoox discloses said storage area network. **(Pages 1 and 2)**

Gadzoox and Black are analogous art because they are from the same field of endeavor/problem involving error or fault detection or recovery.

Though Black does not explicitly reveal the type of network used for controlling (via queue manager) queues, Gadzoox discloses the various benefits of SAN approach where SAN controller includes managability of the storage devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate Gadzoox's Storage Area Network approach for managing storage with Black's message queue network, for the benefits of high bandwidth, modular scalability, high availability and fault tolerance, manageability, ease of integration, and total cost of ownership. **(Found on page 2 of Gadzoox)**

Therefore, it would have been obvious to combine Gadzoox with Black to obtain the invention as specified in claims 19, 26, 37, and 40.

**Claim 20 and 27** are rejected for the reasons set forth hereinabove for claim 19 and 26, and further Black discloses the method further comprising supporting simultaneous access to said message queue (**destination queue 170/170' and transmission queue 160/160'**) by a first queue manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**). **(Figure 3)**

**Claim 22 and 29** are rejected for the reasons set forth hereinabove for claim 21 and 28, and further discloses the method further comprising tracking a quantity of authorized connection handles (**the process responds success thru "retries"; Column 14 line 48-54**) for said queue (**destination queue 170/170' and transmission queue 160/160'**). **(Claim 4 of Black)**

Art Unit: 2182

**Claim 24, 31, and 38** are rejected for the reasons set forth hereinabove for claim 19, 26, and 37, and further Black discloses the method wherein said transaction message control means (via **sending/receiving MCA; Figure 5**) utilizes a syncpoint coordinator (via **syncpoint-manager-controlled unit 330 and 360**). (Column 12 line 9-11, 25-27, 42-46; **Figure 5**)

**Claim 25 and 32** is rejected for the reasons set forth hereinabove for claim 19 and 26, and further Black discloses wherein the step of managing a queue (**destination queue 170/170' and transmission queue 160/160'**) in a network includes preserving data integrity (**reliable storage of queued messages**). (Column 9 line 27-30)

**Claim 34** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the system wherein said transactional message control means (via **sending/ receiving MCA; Figure 5**) includes a syncpoint coordinator (via **syncpoint-manager-controlled unit 330 and 360**). (Column 12 line 9-11, 25-27, 42-46; **Figure 5**)

**Claim 35** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the system wherein said controller includes a lock manager (via **queue manager software**) adapted to preserve data integrity (**provide reliable storage of queued messages**). (Column 9 line 27-30)

**Claim 36** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the article wherein controller (**message channel agent, MCA 180/ 180' and 190/190'; Figure 3**) includes a first queue manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**) to manage said queue (**destination queue 170/170' and transmission queue 160/160'**), and wherein said queue managers (**130/130'**) are heterogeneous (via **different data processing systems; Column 7 line12-15**). (**Figure 2**)

Art Unit: 2182

3. Claim 13-16, 21-23, 28-30, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over George Black et al. (US Patent 5878056), hereafter Black, in view of Dave Tang, (Gadzoox Microsystems) "Storage Area Networking: The Network Behind the Server", hereafter Gadzoox as applied to claim 11, 12, 17-20, 24-27, 31-38, and 40 above, and further in view of Applicant's Admitted Prior Art (US Publication 20060155894), hereafter AAPA.

**Claim 13** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system (**Figure 2 and 3**) further adapted to be authorized (**via messages the application programs have agreed to read from**) by said controller and returned to a call request to connect an application with said queue manager (**message queue manager 130'**). (**Column 8 line 51-64**)

The modified Black, however, does not explicitly disclose the system comprising a connection handle.

However, AAPA teaches, in paragraph [0004] and [0005], that it is well within the level of skill in the art to provide a "connection handle" in an asynchronous messaging and queuing system.

**Claim 14** is rejected for the reasons set forth hereinabove for claim 13, and further Black discloses the system further comprising a counter that tracks a quantity authorized (**the process responds success thru "retries"; Column 14 line 48-54**) for said queue (**destination queue 170/170'and transmission queue 160/160'**). (**Claim 4 of Black**)

**Claim 15** is rejected for the reasons set forth hereinabove for claim 13, and further AAPA discloses the system further comprising an object handle adapted to be dispensed by said queue manager for use in performance of a service to an object. (**Paragraph [0005]**)



Art Unit: 2182

**Claim 16** is rejected for the reasons set forth hereinabove for claim 15, and further AAPA discloses the system wherein said object handle and said connection handle function as input parameters to a call request. (**Paragraph [0005]**)

**Claim 21, 28, and 39** are rejected for the reasons set forth hereinabove for claim 19, 26, and 37, and further Black discloses the method further wherein the step of managing a queue (**destination queue 170/170' and transmission queue 160/160'**) in a network includes authorizing to a call request from said queue manager (**message queue manager 130/130'**). (**Column 8 line 51-64**)

The modified Black, however, does not explicitly disclose the system comprising a connection handle.

However, AAPA teaches, in paragraph [0004] and [0005], that it is well within the level of skill in the art to provide a "connection handle" in an asynchronous messaging and queuing system. AAPA discloses the system comprising a connection handle. (**Paragraph [0005]**)

**Claim 23 and 30** are rejected for the reasons set forth hereinabove for claim 21 and 28, and further AAPA discloses the method wherein the step of managing a queue in a storage area network includes dispensing an object handle by said queue manager for performance of a service to an object. (**Paragraph [0005]**)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BW  
\*\*\*

  
**ALFORD KINDRED**  
**SUPERVISORY PATENT EXAMINER**